

Appl. No. 10634515
Amdt. Date: June 20, 2006
Reply to Office action of: 9/22/04

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A golf ball formed by an injection molding process within a mold having interior mold surfaces, the golf ball comprising a spherical core covered by a spherical shell cover, the ball made of a composite material including one of a plastic and a rubber, compounded with a plurality of metallic flakes, each of the flakes having flat surfaces aligned parallel to the mold's interior surfaces resulting in a brick-wall-like arrangement with overlapping peripheral flake edges, whereby a desired spring-back recovery property in the golf ball is produced.
2. (currently amended) The golf ball of claim 1 wherein the one of a plastic and a rubber is one of a polymer, ionomer, thermoplastic elastomer, rubber based material, or a combination thereof.
3. (currently amended) The golf ball of claim 1 wherein the core is constructed of a composite of a rubber, an organic peroxide and a cross-linking agent.
4. (currently amended) The golf ball of claim 1 wherein the flake is of a metallic alloy having high moduli, tensile strength and fracture toughness.
5. (cancelled)
6. (currently amended) The golf ball of claim 1 wherein the ~~flake is~~metallic flakes are of a material including at least one of: titanium based alloys, aluminum alloys, nickel based alloys, and iron based alloys.
7. (currently amended) The golf ball of claim 1 wherein the ~~flake comprises~~metallic flakes comprise between 2.5 % and 25% of the volume of the golf ball.
8. (currently amended) The golf ball of claim 1 wherein the ~~flake comprises~~metallic flakes comprise a particle size of between 10 microns and 40 microns.
9. (currently amended) The golf ball of claim 1 wherein the ~~flake comprises~~metallic

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flakes comprise a particle size of between 2 microns and 10 microns.

10. (currently amended) The golf ball of claim 1 wherein the ~~flake comprises~~metallic flakes comprise an aspect ratio of between 5 to 1 and 10 to 1.
11. (currently amended) The golf ball of claim 1 wherein the cover has a thickness of between about 0.5 mm and 5.0 mm.
12. (withdrawn) A method of manufacture of a golf ball comprising the steps of injection molding a spherical elastomeric golf ball core; injection molding a mechanically plastic spherical golf ball cover, over, and in intimate contact with the core; compounding a metallic flake into one of the: (i) core, (ii) cover and (iii) core and cover; and aligning the flake with a surface of the golf ball.